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10/066,033	01/31/2002	Andrei Ponomarenko	529	3959

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EXAMINER	
SHINGLES, KRISTIE D	
ART UNIT	**PAPER NUMBER**
2141	

DATE MAILED: 03/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/066,033	PONOMARENKO, ANDREI	
	Examiner	Art Unit	
	Kristie Shingles	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 January 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 January 2002* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-21 are pending.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims **1-20** are provisionally rejected under the judicially created doctrine of double patenting over claims 1-9, 11-16 and 18-22 of copending Application No. 10/062,594. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter. Claims 1-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9, 11-16 and 18-22 of copending Application No. 10/062,594. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications recite substantially similar

scopes and limitations, varying only in terminology. Pending application 10/062,594 includes limitations reciting a "synchronization manager" which is not supported in the instant application. Nonetheless the scope of the instant application is comprised with pending application 10/062,594 with the limitations directed towards configuration database management and storage of transaction data with fault recovery.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Objections

3. Claim **10** is objected to because of the following informalities: statutory inconsistency—line 1 of the claim recites "A system..." whereas, line 2 of the claim recites, "the method...". Appropriate correction is required.

Claim Rejections - 35 USC § 112, second paragraph

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim **10** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 10 recites the limitation "the method comprising the steps of" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim. Clarification and/or correction are required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims **1-4, 16 and 17** are rejected under 35 U.S.C. 102(e) as being anticipated by *Yamaguchi et al* (USPN 6,526,441).

a. **Per claim 1,** *Yamaguchi et al* teach a method of managing a configuration database for a plurality of objects within a network element, comprising the steps of:

- defining an object reference for each object of the plurality of objects (**Abstract and col.1 line 66-col.2 line 23; configuration definition table manages I/O device configuration for a plurality of devices**);
- defining a pointer to a memory location for each object of the plurality of objects (**Abstract, col.2 lines 24-45, col.5 lines 5-8 and col.7 lines 28-38 and col.9 lines 35-45**);

- maintaining a map storing object references and pointers for each object (**Abstract, col.1 line 66-col.2 line 49, col.3 line 52-col.4 line 26 and col.5 lines 11-24; provision for configuration reference table and I/O configuration definition table with address and attribute data and connection information between each I/O device and computer**); and

- storing transactions affecting one or more of the plurality of objects in a transaction database (**Abstract, col.2 lines 37-49, col.3 line 52-col.4 line 59 and col.5 lines 5-8; configuration tables store connection information for the I/O devices, attribute data and address information necessary for executing transactions**).

b. **Per claim 2,** *Yamaguchi et al* teach the method of claim 1 wherein the transactions each comprise one or more actions modifying state data associated with each object, and wherein the transactions are stored in a transaction log file (**col.1 line 66-col.2 line 13, col.4 lines 17-67, col.5 line 11-col.6 line 13 and col.9 lines 55-67; provision for changing or altering of device data in the configuration tables**).

c. **Per claim 3,** *Yamaguchi et al* teach the method of claim 2 wherein, in the event of a failure condition, the method further comprises the steps of: restoring the previous transaction of the network element prior to the failure condition event; re-applying the transactions stored in the transaction log file; and resolving the pointer links contained in the affected objects modified by the actions comprising the previous transaction (**col.6 lines 15-38; if an error occurs the procedure returns to the previous step to correct and restore the data in the configuration definition working table**).

d. **Claim 16** contains limitations that are substantially similar to claims 1-3 and is therefore rejected under the same basis.

e. **Per claim 4,** *Yamaguchi et al* teach the method of claim 3 wherein the transaction database is stored in non-volatile memory (**Figure 1A, col.2 lines 13-20, col.3 line 43-col.4 line**

3 and col.9 lines 35-35; configuration tables are stored in the shared memory of the multi-computer system).

f. **Claim 17** is substantially similar to claims 1 and 4 and is therefore rejected under the same basis.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims **5-7** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Yamaguchi et al* (USPN 6,526,441) in view of *Traversat et al* (USPN 6,115,715).

a. **Per claim 5,** *Yamaguchi et al* teach the method of claim 4 as applied above, yet fail to distinctly teach the method of claim 4 wherein the failure condition comprises one of an unexpected power interrupt condition, an abort condition, or a card element failure condition. However, *Traversat et al* disclose fail conditions such as when a transaction is aborted and updates and restoration after the abort phase (**col.9 line 42-col.10 line 60**).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Yamaguchi et al* and *Traversat et al* for the purpose of providing a method for failure resolution in the event of an abort condition; because it

would provide security and stability of configuration and transaction data in case of system failures or errors.

b. **Per claim 6,** *Yamaguchi et al* teach the method of claim 1 as applied above, yet fail to distinctly teach the method of claim 1 wherein the transactions are issued by a command handler and passed to the transaction database through an agent process. However, *Traversat et al* disclose a transaction handle assignment, which initiates modifications to the configuration database (**Abstract, col.2 lines 18-62, col.6 line 37-col.7 line 38 and col.8 lines 42-59**).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Yamaguchi et al* and *Traversat et al* for the purpose of providing a method for issuing transactions to the system and then for the transactions to be transmitted to a database; because it would implement the utility of the system to acquire data, process, store it and maintain its status information.

c. **Per claim 7,** *Traversat et al* teach the method of claim 6 wherein the agent process comprises one of an alarm manager process, an automatic protection process, and a configuration manager program (**col.7 line 19-col.8 line 59 and col.9 line 7-col.10 line 60; provision for lock API, fault recovery during failures, transaction management and event manager**).

11. Claims **8-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Traversat et al* (USPN 6,115,715) in view of *Davis et al* (USPN 6,115,715).

a. **Per claim 8,** *Traversat et al* teach the method of claim 7 as applied above yet fail to distinctly teach the method of claim 7 wherein the network element is coupled to a parallel

ring network including a first working network and a second standby network. However, Davis et al discloses use of a backup facility for protection of system (**col.9 lines 37-54**).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Traversat et al* and *Davis et al* for the purpose of providing a backup or standby facility for data security and integrity; because it would provide efficient data maintenance in case of system faults or failures.

b. **Per claim 9,** *Davis et al* teach the method of claim 8 wherein the parallel ring network element is a SONET ring network, and the objects comprise transactions on the SONET ring (**col.4 lines 40-52**).

c. **Claim 10** contains limitations that are substantially similar to claims 1, 2, 6 and 9 and is therefore rejected under the same basis.

d. **Per claim 11,** *Traversat et al* teach the system of claim 10 wherein each managed object includes an object reference key and a storage location pointer and wherein logical dependencies among objects are maintained through the linking of storage location pointers in the objects (**col.10 lines 32-47; provision for logical pointers via relational tables and lists**).

e. **Per claim 12,** *Traversat et al* teach the system of claim 11 wherein actions that modify an object are stored in the database file and the transaction log file (**col.7 line 31-col.8 line 59**).

f. **Per claim 13,** *Traversat et al* teach the system of claim 12 wherein, in the event of an abort condition, the most recent configuration state of the network is restored by re-applying the transactions stored in the transaction log file, and resolving the pointer links

contained in the affected managed objects (**col.9 line 42-col.10 line 60; provision for failure resolution in abort condition**).

g. **Per claim 14,** *Traversat et al* teach the system of claim 12 further comprising a free space list maintained by the database manager, the free space list containing record number and size information for objects that have been deleted and are available for use (**col.7 lines 20-57 and col.8 lines 3-59**).

h. **Per claim 15,** *Traversat et al* teach the system of claim 14 wherein the present state of the managed objects is stored in a memory buffer upon modification by one or more the actions comprising a transaction (**col.8 line 42-col.9 line 41 and col.10 lines 1-47; managed transaction and modifications are stored**).

i. **Claim 18** is substantially similar to claim 8 and is therefore rejected under the same basis.

j. **Claim 19** is substantially similar to claim 7 and is therefore rejected under the same basis.

k. **Per claim 20**, *Traversat et al* teach the apparatus of claim 19 wherein the computer network is a SONET ring network, and the objects comprise portions of control cards within nodes of the computer network (**col.12 lines 12-64**).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. *Sciacca* (USPN 6,760,761) discloses systems and methods for standardizing network devices.
b. *Bolt* (USPN 6,467,014) discloses automatic mapping and efficient address translation for multi-surface, multi-zone storage devices.
c. *Curtis et al* (USPN 5,774,689) disclose network configuration management system for digital communication networks.
d. *Crump et al* (USPN 6,823,386) disclose correlating data streams of different protocols.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie Shingles whose telephone number is 571-272-3888. The examiner can normally be reached on Monday-Friday 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristie Shingles
Examiner
Art Unit 2141

kds

RUPAL DHARIA
SUPERVISORY PATENT EXAMINER